

NYASALAND PROTECTORATE

Annual Medical Report

ON THE

HEALTH AND SANITARY CONDITION

OF THE

NYASALAND PROTECTORATE

FOR THE

YEAR ENDED 31st DECEMBER, 1916.

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1918.

OFFICE OF THE PRINCIPAL MEDICAL OFFICER,
ZOMBA,
NYASALAND PROTECTORATE,

15th December, 1917.

SIR,

I have the honour to transmit, for the information of His Excellency the Governor and for transmission to the Right Honourable the Secretary of State an abbreviated Medical Report on the Health and Sanitary Condition of the Nyasaland Protectorate for the year ending the 31st December, 1916, together with the Returns, &c., appended thereto.

I have the honour to be,

Sir,


Your obedient servant,

H. HEARSEY,

*Principal Medical Officer,
Nyasaland Protectorate.*

To

THE HON'BLE THE CHIEF SECRETARY,
ZOMBA.



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CONTENTS.

	PAGE.
I.—ADMINISTRATIVE—	
Staff	7-8
Table I.—Medical Staff	8
Table II.—Financial Return	9
II.—PUBLIC HEALTH—	
(A) General Remarks —	9
1 General Diseases	10
2 Communicable Diseases—	
Mosquito or Insect-borne	10
Infectious or Epidemic	11
(B) European Officials—	11
Table showing Sick, Invaliding and Death Rates for European Officials—	
Port Herald	12
Blantyre	12
Zomba	12
Fort Johnston	13
(c) General European Population	13
III.—SANITATION—	
1 Administrative	13
2 Preventive Measures	13
3 General Measures	13
Table IV.—Summary of Routine Sanitary Work done during the year in—	
Port Herald	14-19
Blantyre	20-25
Zomba	26-31
Fort Johnston	32-37
V.—HOSPITALS AND DISPENSARIES	38
Table VI.—Return of Diseases and Deaths In-Patients for the year 1916	38-40
Table VII.—Return of Diseases (Out-Patients) for the year 1916	40-43

NYASALAND PROTECTORATE.

ANNUAL MEDICAL REPORT

FOR THE YEAR ENDED 31st DECEMBER, 1916.

1. ADMINISTRATIVE.

STAFF.

The Medical Staff consisted of :—

The Principal Medical Officer.

9 Medical Officers.

The Nursing Staff comprised :—

The Matron.

4 Nursing Sisters.

2 Probationers.

P.M.O's Office :—One Clerk.

Subordinate Staff :—1 Second Class Senior Sub-Assistant Surgeon.

3 First Class Sub-Assistant Surgeons.

Of these one is at present in civil employment, two are attached to the Troops, and one has returned to India.

PRINCIPAL APPOINTMENTS AND CHANGES DURING THE YEAR.

New appointments :—Nil.

Leave :—Nil.

Invaliding :—Dr. Barclay was invalided on the 5th October, 1916, and has since retired on pension.

Deaths :—Nil.

DISPOSITION OF THE MEDICAL STAFF IN 1916.

A. Medical Staff.

I. ON CIVIL AND MILITARY DUTY.

(a). At Zomba.

Dr. H. Hearsey, P.M.O. | Dr. N. M. Leys.

Dr. A. G. Eldred.

II. ON MILITARY DUTY WITH N. F. F.

Dr. H. S. Stannus. | Dr. G. M. Sanderson.

Dr. R. Bury.

III. ON CIVIL DUTY.

(a). At Port Herald :—

Dr. R. Drummond.

(b). At Blantyre :—

Dr. A. H. Barclay.

IV. ON SPECIAL DUTY AT KASU :—

Dr. J. B. Davey.

B. Nursing Staff.

I. ON CIVIL AND MILITARY DUTY.

(a). At Zomba.

Miss M. Farrow.

|

Miss Engelbach.

(b). At Fort Johnston.

Miss Gittins.

II. ON MILITARY DUTY WITH N. F. F.

Miss R. Paterson.

|

Miss A. Pallot.

III. ON CIVIL DUTY.

At Blantyre :—

Miss M. Tadman.

|

Miss Hayter.

C. Sub-Assistant Surgeons.

I. ON CIVIL AND MILITARY DUTY WITH N. F. F.

S. A. S. Varyam Singh.

II. ON MILITARY DUTY AT ZOMBA.

Senior S. A. S. Bir Singh.

|

S. A. S. Bira Singh.

S. A. S. Kishen Singh.

TABLE I. MEDICAL STAFF.

Principal Medical Officer : H. Hearsey.*Medical Officers :*

A. H. Barclay.

A. G. Eldred.

J. E. S. Old.

G. M. Sanderson.

J. B. Davey.

R. Drummond.

H. S. Stammus.

R. Bury.

N. M. Leys.

NURSING STAFF.

Matron : R. Paterson.*Nursing Sisters.*

A. M. Tadman.

|

M. Gittins,

A. A. Pallot.

|

M. Farrow.

PROBATIONERS.

E. A. Engelbach.

|

A. M. Hayter.

SUB-ASSISTANT SURGEONS.

Senior S. A. S. Bir Singh

|

S. A. S. Hira Singh.

S. A. S. Varyam Singh.

S. A. S. Kishen Singh.

TABLE II. FINANCIAL RETURN.

The estimated expenditure of the Medical Department for the year 1916-17 was as follows :—

Personal Emoluments	...	...	...	...	£8,249
Other Charges	...	...	...	...	2,859
Total					<u>£11,108</u>

The actual expenditure during the year was as follows :—

Personal Emoluments	...	...	...	...	£7,016	5	5
Other Charges	...	...	...	...	1,792	2	2
Total					<u>£8,808</u>	<u>7</u>	<u>7</u>

The principal savings were under the following heads —

European Staff (due to the resignation of two Medical Officers); Sleeping Sickness investigations (curtailment of); Passages (from suspension of officers proceeding on leave); Wages of Sub-staff (due to termination of appointment of one Sub-Assistant Surgeon, and employment of native staff on military duty); Travelling (owing to many Medical Officers being on military duty).

Revenue: This was derived mainly from hospital fees and the sale of medical stores, and amounted to £215 14s. 6d.

PUBLIC HEALTH.

(A). GENERAL HEALTH.

During the year under review military requirements for labour having necessitated an abnormally increased movement of natives in all parts of the Protectorate, the public health has not been as satisfactory as in previous years.

Small-pox was still confined to the Lilongwe and Dowa districts and although labour was recruited from both these areas the precautionary measures which were instituted proved successful in preventing any spread of the disease. Two localized outbreaks which occurred in the Zomba and Upper Shire districts, respectively, among labourers employed on the military road, were promptly and effectually dealt with.

As in the previous year Sleeping Sickness investigations were confined to the proclaimed area in the Dowa district, the number of cases reported amounting to 31. In 1915 the figures were 25 from this area, plus 4 from other parts of the Protectorate, making a total of 29. It would be misleading to assume that these figures represent the actual incidence of Sleeping Sickness in the Protectorate as a whole, for the results of investigations in the past have shown that the portion of the Marimba district bordering on the Lake is as heavily infected as the proclaimed area in the Dowa district.

It is much to be regretted that bubonic plague has made its appearance in the Protectorate for the first time. Every effort was made to ascertain the source whence this disease gained entry into the North Nyasa district, and enquiry has shown that there can be little doubt but that it was introduced from Mwaya, in German East Africa, during the latter part of the year when native carrier transport between Karonga and Mwaya became frequent and continuous. Three cases of bubonic plague were reported in the neighbourhood of Karonga in the month of November, and ten in December. Further cases occurred during the following year, but at the moment of writing it is satisfactory to record that following the campaign of rat extermination, inoculation and the adoption of other preventive measures, the outbreak is now well in hand and the disease has not shown any indication of spreading to other parts of the Protectorate.

1. GENERAL DISEASES.

There were none of any importance recorded.

2. COMMUNICABLE DISEASES.

(1). MOSQUITO OR INSECT-BORNE.

Malaria.—There were 385 cases of malaria, as against 621 in the previous, and 729 in the preceding year, with no attendant mortality.

The apparent diminution in this as in other diseases shown in the year's returns is attributable to a large proportion of the population being engaged on military service, the returns of sickness amongst whom are separately recorded, and is not to be ascribed to a lowered incidence in the disease rates.

Blackwater Fever.—Two cases were recorded, as against two in 1915, and three in 1914. One of these recovered and one died.

Trypanosomiasis.—During ten months of the year, from January to October, Dr. Davey engaged on Sleeping Sickness investigations in the Proclaimed Area of the Dowa district, and in this period 31 cases of the disease were diagnosed. The annual incidence in previous years, for the Proclaimed Area alone, was 25, 23, 49, 45, 35 and 12.

As to sex, 16 of these 31 cases were males and 15 females. Of these, all were were adults, with the exception of one youth and a female child about 3 years of age.

In addition to searching for cases of Sleeping Sickness in the Proclaimed Area, Dr. Davey examined the blood of 171 apparently healthy natives in this area, with negative results as to the finding of trypanosomes. The animal reactions with the blood of these 171 natives was also negative, monkeys having been employed for this purpose.

The following is a list of the cases of Sleeping Sickness diagnosed in the year 1916 in the Proclaimed Area of the Dowa district.

Serial No.	Name.	Sex.	Village.	Remarks.
241	Okumadyelo	Male	Mlezi	Died.
242	Mtimvera	Female	Chiunda	"
243	Mwamboku-mungu	Male	Kulunda	"
244	Kaonda	"	Chizui	"
245	Chuma	Female	Sumaewa	"
246	Chibanga	Male	Nkwali	"
247	Okumitawa	Female	Mwazawala	"
248	Chituula	"	Mlima	"
249	Chitanje	Male	Chiwara	"
250	Chigwe	"	Marangeza	"
251	Mpulupudza	Female	Chiunda	"
252	Bolela	Male	Sumaewa	"
253	Akumngongeni	Female	Juma	"
254	Manyanjara	"	Chinyama	"
255	Kangafe	Male	"	"
256	Chimbalu	"	Njati	"
257	Joseni	"	Nkwali	"
258	Mkaka	"	Njati	"
259	Kanyamire	"	Kulunda	"
260	Mwalikhara	Female	Mayambo	"
261	Mwetsere	"	Chimbara	"
262	Yesao	Male	Mtalimanja	"
263	Chimfulu	"	Ndewere	"
264	Andaima	Female	Chindungwa	"
265	Mdadzwanji	"	Kambwiri	"
266	Solomon	Male	Mwalara	"
267	Tongole	"	Nkombedza	"
268	Mdachitatsoka	Female	Chimutu	"
269	Kunambiche	"	Kambwiri	"
270	Kanzake	"	Syasya	"
271	Mdampachanu	"	Koso	"

Of these cases Nos. 254, 258 and 271 were alive when the investigations terminated; the remainder had died.

(2). INFECTIOUS OR EPIDEMIC.

Beri Beri.—Ten cases were reported, as against six in the previous year; one of these died.

Chicken-pox.—There were 29 cases, as compared with 119 in the previous, and 27 in the preceding year.

Dysentery.—262 cases were notified, with two deaths, as against 351 cases and fourteen deaths in 1915, and 315 cases and six deaths in 1914.

Enteric.—Three cases were recorded in uninoculated subjects, one of whom died; in 1915 there were six cases and no deaths.

Erysipelas.—Only one case was returned, as in the previous year.

Gonorrhoea.—There were 45 cases, as against 34 in 1915, and 62 in 1914.

Influenza.—Three cases came under treatment.

Leprosy.—Two cases, as compared with 12 in the previous, and sixteen in the preceding year.

Measles.—Only five cases, as against nine and twelve in previous years.

Pneumonia.—There were 44 cases with eight deaths recorded, as compared with 41 cases and five deaths in 1915, and 39 cases and four deaths in 1914.

Syphilis.—118 cases, as against 126 in the previous, and 125 in the preceding year.

Tuberculosis.—Thirteen cases were notified, with no attendant mortality, as compared with 16 with three deaths in the previous year.

Whooping Cough. There were four cases, as against nineteen and fourteen in previous years.

Yaws. Fifteen cases, as compared with 22 in 1915, and 13 in 1914.

B. EUROPEAN OFFICIALS.

Owing to the longer tours of service necessitated by the War the health of European Officials shows little improvement as compared with the previous year.

Nine were invalided during the year, as against ten in 1915, and seven in 1914.

There were 185 cases treated, with three deaths, as compared with 188 cases and one death in 1915, and 151 cases and no deaths in 1914. The fatal cases were one of enteric; one of abdominal injuries inflicted by a rhinoceros; and one from blackwater fever.

Of the total admissions malaria accounted for 30 cases, as compared with 41 in the previous year.

The causes of invaliding were as follows:—Diabetes mellitus 1; Pulmonary tuberculosis 1; Chronic suppurative otitis media 1; Chronic hepatitis 1; Chronic arthritis 1; Neurasthenia 1; Chronic malaria 1; Pyuria 1; and Abscess of the antrum 1.

TABLE SHOWING SICK, INVALIDING, AND DEATH RATES FOR EUROPEAN OFFICIALS, PORT HERALD.

	1914	1915	1916
Total number of Officials	11	13	14
Average number resident	7	9	7
Total number on Sick List	5	8	10
Total number of days on Sick List	111	181	117
Average daily number on Sick List	30	50	35
Percentage of Sick to average number resident	71.4	88.8	143
Average number of days on Sick List for each Patient	22.2	20.1	5.85
Average Sick time to each resident	15.8	20.1	16.7
Total number Invalided	Nil	1	1
Percentage of Invalidings to total residents	„	7.69	7.14
Total Deaths	„	Nil	Nil
Percentage of Deaths to total residents	„	„	„
„ „ „ „ average number resident	„	„	„
No. of cases of Sickness contracted away from residence	„	1	„

TABLE SHOWING SICK, INVALIDING, AND DEATH RATES FOR EUROPEAN OFFICIALS, BLANTYRE

	1914	1915	1916
Total number of Officials	16	15	21
Average number resident	12	15	15
Total number on Sick List	11	15	14
Total number of days on Sick List	73	98	14
Average daily number on Sick List	20	26	14
Percentage of Sick to average number resident	91.6	100	93
Average number of days on Sick List for each Patient	6.6	6.5	7
Average Sick time to each resident	6.08	6.5	7
Total number Invalided	Nil	1	2
Percentage of Invalidings to total residents	„	6.6	13
Total Deaths	„	Nil	Nil
Percentage of Deaths to total residents	„	„	„
„ „ „ „ average number resident	„	„	„
No. of cases of Sickness contracted away from residence	4	2	3

TABLE SHOWING SICK, INVALIDING, AND DEATH RATES FOR EUROPEAN OFFICIALS, ZOMBA.

	1914	1915	1916
Total number of Officials	75	49	67
Average number resident	58	49	47
Total number on Sick List	90	63	78
Total number of days on Sick List	591	1151	501
Average daily number on Sick List	1.5	3.1	1.4
Percentage of Sick to average number resident	105.5	128.5	165.9
Average number of days on Sick List for each Patient	6.5	6.9	6.4
Average Sick time to each resident	10.2	23.1	7.5
Total number Invalided	6	8	5
Percentage of Invaliding to total residents	6.8	16.6	7.4
Total Deaths	Nil	1	Nil
Percentage of Deaths to total residents	„	2	„
„ „ „ „ average number residents	„	2	„
No. of cases of Sickness contracted away from residence	„	Nil	„

TABLE SHOWING SICK, INVALIDING, AND DEATH RATES FOR EUROPEAN OFFICIALS, FORT JOHNSTON

	1914	1915	1916
Total number of Officials	16	10	7
Average number resident	9	6	5
Total number on Sick List	7	6	4
Total number of days on Sick List	89	79	111
Average daily number on Sick List	24	21	304
Percentage of Sick to average number resident	77.7	100	80
Average number of days on Sick List for each Patient	12.7	13.1	27.7
Average Sick time to each resident	9.9	13.1	22.2
Total number Invalided	2	Nil	Nil
Percentage of Invalidings to total residents	12.5	"	"
Total Deaths	Nil	"	"
Percentage of Deaths to total residents	"	"	"
" " " " average number resident	"	"	"
No. of cases of Sickness contracted away from residence...	"	"	"

(c). GENERAL EUROPEAN POPULATION.

There is nothing noteworthy to record under this heading. A total of 288 cases of sickness with three deaths was returned, as against 300 in 1915, and 240 in 1914.

The principal diseases treated were, in order of frequency, malaria, bowel complaints, injuries, and diseases of venereal origin.

III.—SANITATION.

I—ADMINISTRATIVE.

No special legislation applicable to sanitary matters was enacted during the year.

2—PREVENTIVE MEASURES.

Malaria. The usual routine ant-mosquito measures have been carried out in the various townships.

EPIDEMIC DISEASES.

Small-pox. The following is a return of the vaccinations which were performed during the year.

District	Successful	Modified	Failed	Not seen.	Total
Lower Shire	3,698	1,050	751	493	5,992
Ruo	3,878	981	369	196	5,424
Mlanje	1,756	1,402	1,033	141	4,332
Blantyre	19,794	6,975	3,233	1,369	31,371
West Shire	415	456	546	148	1,843
Zomba	2,466	562	582	381	3,991
Upper Shire	2,245	1,260	1,773	337	5,615
South Nyasa	47,045	4,530	2,531	1,660	55,766
Dedza	2,408	1,554	1,674	2,661	8,297
Lilongwe	10,536	3,158	1,992	1,502	17,188
Dowa	4,451	3,641	6,067	615	14,774
Marimba	1,941	922	1,570	7	4,440
Mombera	10,940	1,111	674	1,061	13,786
West Nyasa	4,072	1,667	2,162	998	8,899
North Nyasa	150	263	432	—	845
Total	115,795	29,532	25,389	11,569	182,563

3. GENERAL MEASURES.

A summary of routine sanitary work done in the various towns during the year is shown in the subjoined Table.

TABLE IV.

SUMMARY OF ROUTINE SANITARY WORK DONE DURING THE YEAR
IN THE TOWN.

1. NAME OF TOWN. PORT HERALD.

	Approximate area.	Number of proclaimed open spaces.
1914	200 acres	99
1915	200 „	99
1916	200 „	98 (unoccupied plots mostly)

2. POPULATION.

	Number of Natives.		Number of Europeans.		Total.
	Males.	Females.	Males.	Females.	
1914	82	22	15	3	122
1915	82	22	15	3	122
1916	109	16	13	6	144

3. HOUSING.

	Number occupied by Europeans.	Number occupied by Natives.
Number of Houses:—		
1914	11	—
1915	12	—
1916	11	—
Number of Huts:—		
1914	—	32
1915	—	32
1916	—	85 (some, 10, grass; others, 75 brick)

4. MOSQUITO PROTECTION OF HOUSES.

	1914	1915	1916
Number of European houses wholly mosquito-protected ...	3	3	3
Number of European houses with mosquito room	5	6	6
Number rendered during the year wholly mosquito-protected	—	—	—
Number rendered during the year partially mosquito-protected	3	1	—

5. ERECTION OF NEW BUILDINGS DURING THE YEAR.

	1914	1915	1916
Number of public buildings erected with sanction as to site, construction, and relation to other buildings	—	—	—
Number of houses erected with sanction as to site, construction, and relation to other buildings	—	1	—
Number of huts erected with sanction as to site, construction, and relation to other buildings	—	—	—
Number of houses built without sanction	2	—	—
Number of huts built without sanction	—	—	—

ACTION TAKEN.

	Number of Prosecutions		Number demolished.	
	Huts.	Houses.	Huts.	Houses.
1914	Nil	Nil	Nil	Nil
1915	”	”	”	”
1916	”	”	”	”

6. MARKETS.

	Total number.	Number paved and drained.	Number unpaved.
1914	Nil	Nil	Nil
1915	”	”	”
1916	”	”	”

7. SLAUGHTER-HOUSES.

	Total number.	Number paved and drained.	Number unpaved.
1914	Nil	Nil	Nil
1915	”	”	”
1916	”	”	”

8. LATRINES.

	For Males.		For Females.	
	Number.	Number of seats.	Number.	Number of seats.
Number of Public Latrines :—				
1914	4	8	3	3
1915	5	10	3	3
1916	3	6	—	—
Number of new Public Latrines erected during the year :—				
1914	4	8	—	—
1915	1	2	—	—
1916	1	2	—	—
Number of Public Latrines repaired during the year :—				
1914	—	—	—	—
1915	3	6	3	3
1916	—	—	—	—
Number of Public Latrines demolished during the year :—				
1914	4	—	—	—
1915	—	—	—	—
1916	—	—	—	—

	1914	1915	1916
Number of Private Latrines	11	12	12
Average number of pails of nightsoil removed daily	—	12	12
Average number of soiled pails removed and clean pails substituted	—	12	12
Number of nightsoil men employed to clean latrines and remove excreta	—	2	2
Number of cesspools	—	—	—
Number of cesspools cleansed	—	—	—
Number of new cesspools constructed during the year	—	—	—
Number of old cesspools abolished	—	—	—
Number of cesspools oiled regularly by Department	—	—	—

9. REMOVAL OF REFUSE.

	1914	1915	1916
Number of dustbins	—	24	24
Number of carts at work daily to remove refuse from streets	—	1	—
Amount of refuse removed daily	—	12 loads	Not estimated.
Number of carts at work daily to remove refuse from yards and premises... .. .	—	1	Not estimated.
Amount of refuse removed daily from yards and premises	—	12 loads	Not estimated.
Number of men employed for moving refuse	—	2	2

10. MODE OF DISPOSAL OF EXCRETA, REFUSE, AND OFFAL.

	Daily average number of pails of excreta.			Daily average number of cartloads of refuse			Daily average number of cartloads of Slaughter House and Market Offal.		
	1914	1915	1916	1914	1915	1916	1914	1915	1916
Buried or trenched ...	Buried		12	Nil	Nil	Nil	Nil	Nil	Nil
Burnt ...	—	—	—	—	—	—	—	—	—
Thrown into sea ...	Nil	Nil	Nil	—	—	—	—	—	—
Otherwise dealt with ...	—	—	—	—	—	—	—	—	—

State mode of disposal.

11. AVERAGE DAILY NUMBER OF CARTLOADS OF TIN CANS, BOTTLES, BROKEN CROCKERY, AND OTHER INCOMBUSTIBLE MATERIAL REMOVED FROM HOUSES, HUTS, AND COMPOUNDS.

1914	1915	1916
Not estimated.	Not	estimated.

12. WATER SUPPLY.

Nature of Water Supply.	1914	1915	1916
Pipe-borne water :—			
Source (river, lake, or spring) :—			
Number of linear yards ...	Nil	Nil	Nil
Number of stand-pipes along roads ...	—	—	—
Number of stand-pipes in compounds and houses ...	—	—	—
Wells :—			
Public :—			
Number ...	Nil	Nil	Nil
Number with pumps protected against surface water and mosquito-protected ...	—	—	—
Private :—			
Number ...	4	5	3
Number protected against surface water and mosquito-protected ...	3	2	—
Tanks :—			
Public :—			
Number underground ...	Nil	Nil	Nil
Number mosquito-protected and served by pumps ...	—	—	—
Number above ground ...	—	—	—
Number mosquito-protected ...	—	—	—
Number of 400 gallons capacity or less ...	—	—	—
Number above 400 gallons ...	—	—	—
Private :—			
Number underground ...	Nil	—	—
Number mosquito-protected ...	—	—	—
Number above ground ...	—	—	1
Number mosquito-protected ...	—	—	1
Number of 400 gallons capacity or less ...	—	—	—
Number above 400 gallons ...	—	—	1

Nature of Water Supply.	1914	1915	1916
Nature of tanks :—			
Wood	—	—	—
Iron	1	—	1
Concrete	—	—	—
Barrels :—			
Number	—	—	—
Number mosquito-protected	—	—	—

13. DRAINAGE.

Nature of Drainage.	Public.	Private.
Masonry drains :—		
Lineal yards of masonry drains :—		
1914	45	Nil
1915	64	”
1916	479	”
Lineal yards reconstructed during the year :—		
1914	10	”
1915	20	”
1916	—	”
Lineal yards repaired during the year :—		
1914	—	”
1915	20	”
1916	—	”
Lineal yards of new drains constructed during the year :—		
1914	—	”
1915	20	”
1916	414	”
Earth drains or ditches :—		
Number of linear yards of ditches cleaned :—		
1914	55	”
1915	400	”
1916	400	”
Number of linear yards of ditches dug and graded :—		
1914	50	”
1915	100	”
1916	100	”
Average frequency of clearing ditches of grass :—		
1914	Twice yearly.	”
1915	”	”
1916	”	”

14. CLARANCE OF UNDERGROWTH, LONG GRASS, AND JUNGLE.

	1914	1915	1916
Number of square yards of weeds, grass, and vegetation cut and removed	Total	area of	township
Average frequency of clearance of rank vegetation on same area	Twice	Total area once 300 acres twice.	Twice

15. EXCAVATIONS AND LOW-LYING LAND.

	1914	1915	1916
Number of pools and excavations	Nil	Nil	Several.
Number of excavations filled up	—	—	—
Amount of low-lying and marsh land raised and drained ...	—	—	—
Number of pools, marshes, streams, &c., fish-stocked ...	—	—	—
Number of cubic yards of material used for filling up pools and excavations	—	—	—
Number of persons fined for making new excavations	—	—	—
Average number of men daily employed in filling up pools &c.	—	—	—

16. OILING.

	1914	1915	1916
Number of drains oiled	Nil	Nil	Nil
Number of pools and excavations oiled	—	—	—
Number of tanks and barrels oiled	—	—	—
Average number of men daily employed for oiling drains, pools, and watertanks or barrels	—	—	—

17. INSPECTIONS AND PROSECUTIONS.

	1914	1915	1916
Number of inspectors employed	—	1	—
Number of houses inspected	—	—	?
Number of houses where larvae were found	—	4	—
Number of notices served to remove conditions causing the breeding of larvae	—	3	—
Number of persons fined for having mosquito larvae on premises	—	—	—
Number of notices served to remove insanitary conditons on premises	1	1	—
Number of persons fined for not removing insanitary conditions after notice	—	—	—
Number of soda and aerated water factories inspected ...	1	—	—

TABLE IV.
SUMMARY OF ROUTINE SANITARY WORK DONE DURING THE YEAR
IN THE TOWN.

1. NAME OF TOWN. BLANTYRE.

—	Approximate area.	Number of proclaimed open spaces.
1914	1,685	Sports Grounds
1915	1,684	Golf links.
1916	1,684	Golf links, and old show ground.

2. POPULATION.

—	Number of Natives.		Number of Europeans.		Total.
	Males.	Females.	Males.	Females.	
1914	391	160	53	21	625
1915					
1916	60	60	48	21	189

3. HOUSING.

—	Number occupied by Europeans.	Number occupied by Natives.
Number of Houses:—		
1914	56	—
1915	56	—
1916	—	—
Number of Huts:—		
1914	—	600
1915	—	620
1916	56	300

4. MOSQUITO PROTECTION OF HOUSES.

—	1914	1915	1916
Number of European houses wholly mosquito-protected ...	1	1	—
Number of European houses with mosquito room	1	1	1
Number rendered during the year wholly mosquito-protected	1	—	—
Number rendered during the year partially mosquito-protected	1	1	—

5. ERECTION OF NEW BUILDINGS DURING THE YEAR.

	1914	1915	1916
Number of public buildings erected with sanction as to site, construction, and relation to other buildings	4	1	—
Number of houses erected with sanction as to site, construction, and relation to other buildings	Nil	Nil	—
Number of huts erected with sanction as to site, construction, and relation to other buildings	”	20	—
Number of houses built without sanction	”	Nil	2
Number of huts built without sanction	”	”	—

ACTION TAKEN.

	Number of Prosecutions		Number demolished.	
	Huts.	Houses.	Huts.	Houses.
1914	Nil	Nil	Nil	Nil
1915	”	”	”	”
1916	”	”	”	”

6. MARKETS.

	Total number.	Number paved and drained.	Number unpaved.
1914	1	Nil	1
1915	1	”	1
1916	1	”	1

7. SLAUGHTER-HOUSES.

	Total number.	Number paved and drained.	Number unpaved.
1914	1	Nil	1
1915	1	”	1
1916	1	”	1

8. LATRINES.

	For Males.		For Females.	
	Number.	Number of seats.	Number.	Number of seats.
Number of Public Latrines :—				
1914	4	—	3	—
1915	4	—	4	—
1916	4	—	4	—
Number of new Public Latrines erected during the year :—				
1914	—	—	—	—
1915	—	—	—	—
1916	—	—	—	—
Number of Public Latrines repaired during the year :—				
1914	—	—	—	—
1915	—	—	—	—
1916	2	—	2	—
Number of Public Latrines demolished during the year :—				
1914	1	—	—	—
1915	—	—	—	—
1916	—	—	—	—

	1914	1915	1916
Number of Private Latrines	78	67	67
Average number of pails of nightsoil removed daily ...	78	67	67
Average number of soiled pails removed and clean pails substituted	78	67	67
Number of nightsoil men employed to clean latrines and remove excreta	—	—	—
Number of cesspools	—	—	—
Number of cesspools cleansed	Nil	Nil	—
Number of new cesspools constructed during the year ...	—	—	—
Number of old cesspools abolished	—	—	—
Number of cesspools oiled regularly by Department	—	—	—

9. REMOVAL OF REFUSE.

	1914	1915	1916
Number of dustbins	6	6	6
Number of carts at work daily to remove refuse from streets	2	1	1
Amount of refuse removed daily	—	—	—
Number of carts at work daily to remove refuse from yards and premises	—	—	—
Amount of refuse removed daily from yards and premises ...	—	—	—
Number of men employed for moving refuse	8	8	8

10 MODE OF DISPOSAL OF EXCRETA, REFUSE, AND OFFAL.

	Daily average number of pails of excreta.			Daily average number of cartloads of refuse			Daily average number of cartloads of Slaughter House and Market Offal.		
	1914	1915	1916	1914	1915	1916	1914	1915	1916
Buried or trenched ...	13	67	67	2	2	2	Nil.	Nil.	Nil.
Burnt ...	Nil	Nil	Nil	Nil	—	—	—	—	—
Thrown into sea ...	—	—	—	—	—	—	—	—	—
Otherwise dealt with ...	—	—	—	—	—	—	—	—	—

State mode of disposal.

11. AVERAGE DAILY NUMBER OF CARTLOADS OF TIN CANS, BOTTLES, BROKEN CROCKERY, AND OTHER INCOMBUSTIBLE MATERIAL REMOVED FROM HOUSES, HUTS, AND COMPOUNDS.

1914	1915	1916
Included in No. 10		Nil

12. WATER SUPPLY.

Nature of Water Supply.	1914	1915	1916
Pipe-borne water :—			
Source (river lake, or spring) :—			
Number of linear yards ...	Nil	Nil	Nil
Number of stand-pipes along roads ...	—	—	—
Number of stand-pipes in compounds and houses ...	—	—	—
Wells :—			
Public :—			
Number ...	2	2	2
Number with pumps protected against surface water and mosquito-protected ...	Covered	in but without	pumps
Private :—			
Number ...	4	4	4
Number protected against surface water and mosquito-protected ...	All protected,	one with	pump
Tanks :—			
Public :—			
Number underground ...	Nil	Nil	Nil
Number mosquito-protected and served by pumps ...	—	—	—
Number above ground ...	—	—	—
Number mosquito-protected ...	—	—	—
Number of 400 gallons capacity or less ...	—	—	—
Number above 400 gallons ...	—	—	—
Private :—			
Number underground ...	18	18	18
Number mosquito-protected ...	5	5	5
Number above ground ...	—	—	—
Number mosquito-protected ...	—	—	—
Number of 400 gallons capacity or less ...	—	—	16
Number above 400 gallons ...	13	18	20

Nature of Water Supply.	1914	1915	1916
Nature of tanks :—			
Wood	—	—	—
Iron	18	18	20
Concrete	—	—	—
Barrels :—			
Number	—	—	—
Number mosquito-protected	—	—	—

13. DRAINAGE.

Nature of Drainage.	Public.	Private.
Masonry drains :—		
Lineal yards of masonry drains :—		
1914	A few roads with	brick gutters
1915		
1916	200	—
Lineal yards reconstructed during the year :—		
1914	All kept in	order.
1915	"	"
1916	250	"
Lineal yards repaired during the year :—		
1914	All kept in	order.
1915	—	—
1916	200	—
Lineal yards of new drains constructed during the year :—		
1914	—	—
1915	About 400 yards	constructed
1916	250	—
Earth drains or ditches :—		
Number of linear yards of ditches cleaned :—		
1914	All roadside ditches	cleaned periodically
1915	"	"
1916	"	"
Number of linear yards of ditches dug and graded :—		
1914	—	—
1915	—	—
1916	—	—
Average frequency of clearing ditches of grass :—		
1914	—	—
1915	—	—
1916	—	—

14. CLEARANCE OF UNDERGROWTH, LONG GRASS AND JUNGLE.

	1914	1915	1916
Number of square yards of weeds, grass, and vegetation cut and removed	No	record.	—
Average frequency of clearance of rank vegetation on same area	Cleaned per	iodically as	required

15. EXCAVATIONS AND LOW-LYING LAND.

	1914	1915	1916
Number of pools and excavations	Nil	All pools reported by Sanitary Inspector are drained or filled in at once by occupiers of land.	
Number of excavations filled up	—		
Amount of low-lying and marsh land raised and drained ...	—		
Number of pools, marshes, streams, &c., fish-stocked ...	—		
Number of cubic yards of material used for filling up pools and excavations	—		
Number of persons fined for making new excavations	—		
Average number of men daily employed in filling up pools &c.	—		

16. OILING.

	1914	1915	1916
Number of drains oiled	Nil	Nil	Nil
Number of pools and excavations oiled	—	—	—
Number of tanks and barrels oiled	—	—	—
Average number of men daily employed for oiling drains, pools, and watertanks or barrels	—	—	—

17. INSPECTIONS AND PROSECUTIONS.

	1914	1915	1916
Number of inspectors employed	One native Sanitary Inspector works under M.O.H.		
Number of houses inspected	Nil	Nil	All are inspected regularly.
Number of houses where larvae were found ...	2	4	4
Number of notices served to remove conditions causing the breeding of larvae	2	4	4
Number of persons fined for having mosquito larvae on premises	—	—	—
Number of notices served to remove insanitary conditions on premises	47	63	80
Number of persons fined for not removing insanitary conditions after notice	43	—	—
Number of soda and aerated water factories inspected ...	2	2	2

TABLE IV.
SUMMARY OF ROUTINE SANITARY WORK DONE DURING THE YEAR
IN THE TOWN.

1. NAME OF TOWN. ZOMBA.

—	Approximate area.	Number of proclaimed open spaces.
1914	668 acres	Unknown.
1915	668 „	do.
1916	668 „	do.

2. POPULATION.

—	Number of Natives.		Number of Europeans.		Total.
	Males.	Females.	Males.	Females.	
1914	287	73	58	36	454
1915	345	72	74	32	503
1916	327	120	71	30	548

3. HOUSING.

—	Number occupied by Europeans.	Number occupied by Natives.
Number of Houses :—		
1914	57	36
1915	60	43
1916	63	53
Number of Huts :—		
1914	None	33
1915	„	40
1916	„	18

4. MOSQUITO PROTECTION OF HOUSES.

—	1914	1915	1916
Number of European houses wholly mosquito-protected ...	Nil	Nil	Nil
Number of European houses with mosquito room	„	„	„
Number rendered during the year wholly mosquito-protected	„	„	„
Number rendered during the year partially mosquito-protected	„	„	„

5. ERECTION OF NEW BUILDINGS DURING THE YEAR.

	1914	1915	1916
Number of public buildings erected with sanction as to site, construction, and relation to other buildings	Nil	Nil	Nil
Number of houses erected with sanction as to site, construction, and relation to other buildings	1	1	3
Number of huts erected with sanction as to site, construction, and relation to other buildings	2	Nil	Unknown.
Number of houses built without sanction	Nil	"	"
Number of huts built without sanction	"	"	"

ACTION TAKEN.

	Number of Prosecutions		Number demolished.	
	Huts.	Houses.	Huts.	Houses.
1914	Nil	Nil	Nil	Nil
1915	"	"	"	"
1916	"	"	"	"

6. MARKETS.

	Total number.	Number paved and drained.	Number unpaved.
1914	1	Nil	1
1915	1	"	1
1916	1	"	1

7. SLAUGHTER-HOUSES.

	Total number.	Number paved and drained.	Number unpaved.
1914	2	Unknown.	2
1915	2	"	2
1916	Nil	"	Nil

8. LATRINES.

	For Males.		For Females.	
	Number.	Number of seats.	Number.	Number of seats.
Number of Public Latrines :—				
1914	5	24	3	12 trenches
1915	5	26	3	15
1916	5	26	3	15
Number of new Public Latrines erected during the year :—				
1914	3	Nil	3	30
1915	Nil	„	Nil	Nil
1916	„	„	„	„
Number of Public Latrines repaired during the year :—				
1914	2	Trench	5	Trench
1915	Nil	Nil	Nil	Nil
1916	2	10	1	5
Number of Public Latrines demolished during the year :—				
1914	3	Nil	3	Nil
1915	Nil	„	Nil	„
1916	„	„	„	„

	1914	1915	1916
Number of Private Latrines	57	60	63
Average number of pails of nightsoil removed daily ...	57	60	63
Average number of soiled pails removed and clean pails substituted	Nil	Nil	Nil
Number of nightsoil men employed to clean latrines and remove excreta	Unknown	Unknown	6
Number of cesspools	Nil	Nil	Nil
Number of cesspools cleansed	„	„	„
Number of new cesspools constructed during the year	„	„	„
Number of old cesspools abolished	1	„	„
Number of cesspools oiled regularly by Department	Nil	„	„

9. REMOVAL OF REFUSE.

	1914	1915	1916
Number of dustbins	57	60	30
Number of carts at work daily to remove refuse from streets	Nil	Nil	Nil
Amount of refuse removed daily	Unknown	Unknown	Unknown.
Number of carts at work daily to remove refuse from yards and premises	Nil	Nil	Nil
Amount of refuse removed daily from yards and premises ...	No record	No record	Unknown.
Number of men employed for moving refuse	„	„	„

10. MODE OF DISPOSAL OF EXCRETA, REFUSE AND OFFAL.

	Daily average number of pails of excreta.			Daily average number of cartloads of refuse			Daily average number of cartloads of Slaughter House and Market Offal.		
	1914	1915	1916	1914	1915	1916	1914	1915	1916
Buried or trenched ...	92	62	61	—	—	—	—	—	—
Burnt ...	Nil	Nil	Nil	—	—	—	—	—	—
Thrown into sea ...	”	”	”	—	—	—	—	—	—
Otherwise dealt with ...	”	”	”	—	—	—	—	—	—

State mode of disposal.

11. AVERAGE DAILY NUMBER OF CARTLOADS OF TIN CANS, BOTTLES, BROKEN CROCKERY,
AND OTHER INCOMBUSTIBLE MATERIAL REMOVED FROM HOUSES, HUTS AND COMPOUNDS.

1914	1915	1916
No record	No record	No record

12. WATER SUPPLY.

Nature of Water Supply.	1914	1915	1916
Pipe-borne water :—			
Source (river, lake, or spring) :—			
Number of linear yards ...	River	River	River
Number of stand-pipes along roads ...	Nil	Nil	Nil
Number of stand-pipes in compounds and houses ...	—	—	—
Wells :—			
Public :—			
Number ...	—	—	—
Number with pumps protected against surface water and mosquito-protected ...	Nil	Nil	Nil
Private :—			
Number ...	—	—	—
Number protected against surface water and mosquito- protected ...	—	—	—
Tanks :—			
Public :—			
Number underground ...	—	—	—
Number mosquito-protected and served by pumps ...	—	—	—
Number above ground ...	—	—	—
Number mosquito-protected ...	—	—	—
Number of 400 gallons capacity or less ...	—	—	—
Number above 400 gallons ...	—	—	—
Private :—			
Number underground ...	—	—	—
Number mosquito-protected ...	—	—	—
Number above ground ...	1	—	—
Number mosquito-protected ...	1	—	—
Number of 400 gallons capacity or less ...	1	—	—
Number above 400 gallons ...	Nil	—	—

Nature of Water Supply.	1914	1915	1916
Nature of tanks :—			
Wood	Nil	Nil	Nil
Iron	1	1	1
Concrete	Nil	Nil	Nil
Barrels :—			
Number	Nil	Nil	Nil
Number mosquito-protected	—	—	—

13. DRAINAGE.

Nature of Drainage.	Public.	Private.
Masonry drains :—		
Lineal yards of masonry drains :—		
1914	1704	Nil
1915	1704	"
1916	1704	"
Lineal yards reconstructed during the year :—		
1914	Nil	"
1915	"	"
1916	"	"
Lineal yards repaired during the year :—		
1914	"	"
1915	"	"
1916	"	"
Lineal yards of new drains constructed during the year :—		
1914	"	"
1915	"	"
1916	440 yds	"
Earth drains or ditches :—		
Number of linear yards of ditches cleaned :—		
1914	Unknown	Unknown.
1915	"	"
1916	"	"
Number of linear yards of ditches dug and graded :—		
1914	"	"
1915	"	"
1916	"	"
Average frequency of clearing ditches of grass :—		
1914	Periodically.	
1915	"	
1916	Once a year.	

14. CLARANCE OF UNDERGROWTH, LONG GRASS AND JUNGLE.

	1914	1915	1916
Number of square yards of weeds, grass, and vegetation cut and removed	—	—	—
Average frequency of clearance of rank vegetation on same area	About once a year	About once a year.	About once a year.

15. EXCAVATIONS AND LOW-LYING LAND.

	1914	1915	1916
Number of pools and excavations	Nil	Nil	2
Number of excavations filled up	9	2	2
Amount of low-lying and marsh land raised and drained ...	Nil	,,	2 acres
Number of pools, marshes, streams, &c., fish-stocked ...	,,	,,	Nil
Number of cubic yards of material used for filling up pools and excavations	,,	,,	,,
Number of persons fined for making new excavations	,,	,,	1
Average number of men daily employed in filling up pools &c.	,,	,,	Nil

16. OILING.

	1914	1915	1916
Number of drains oiled	Nil	Nil	Nil
Number of pools and excavations oiled	,,	1	,,
Number of tanks and barrels oiled	,,	Nil	,,
Average number of men daily employed for oiling drains, pools, and watertanks or barrels	,,	,,	,,

17. INSPECTIONS AND PROSECUTIONS.

	1914	1915	1916
Number of inspectors employed	1	1	1
Number of houses inspected	57	60	*63
Number of houses where larvae were found	Rain	gutters	18
Number of notices served to remove conditions causing the breeding of larvae	Nil	6	7
Number of persons fined for having mosquito larvae on premises	1	Nil	2
Number of notices served to remove insanitary conditions on premises	100	40	49
Number of persons fined for not removing insanitary conditions after notice	29	Nil	6
Number of soda and aerated water factories inspected ...	1	2	1

* And Indian Houses.

TABLE IV.

SUMMARY OF ROUTINE SANITARY WORK DONE DURING THE YEAR
IN THE TOWN.

1. NAME OF TOWN. FORT JOHNSTON

—				Approximate area.	Number of proclaimed open spaces.
1914	...	...	...	44 acres	Nil
1915	...	...	...	44 "	"
1916	...	...	...	44 "	"

2. POPULATION.

—				Number of Natives.		Number of Europeans.		Total.
				Males.	Females.	Males.	Females.	
1914	...	...	...	74	23	17	5	119
1915	...	...	...	74	23	21	6	124
1916	...	...	...	74	23	80	8	185

3. HOUSING.

—				Number occupied by Europeans.	Number occupied by Natives and Asiatics.
Number of Houses:—					
1914	...	...	...	15	—
1915	...	...	...	15	28
1916	...	...	...	15	28
Number of Huts:—					
1914	...	...	...	1	—
1915	...	...	...	11	4
1916	...	...	...	50	14

4. MOSQUITO PROTECTION OF HOUSES.

—	1914	1915	1916
Number of European houses wholly mosquito-protected ...	Nil	Nil	3
Number of European houses with mosquito room ...	11	12	12
Number rendered during the year wholly mosquito-protected	Nil	Nil	3
Number rendered during the year partially mosquito-protected ...	1	2	—

5. ERECTION OF NEW BUILDINGS DURING THE YEAR.

	1914	1915	1916
Number of public buildings erected with sanction as to site, construction, and relation to other buildings	Nil	Nil	1
Number of houses erected with sanction as to site, construction, and relation to other buildings	2	1	Nil
Number of huts erected with sanction as to site, construction, and relation to other buildings	Nil	13	10
Number of houses built without sanction	„	Nil	Nil
Number of huts built without sanction	„	2	20

ACTION TAKEN.

	Number of Prosecutions		Number demolished.	
	Huts.	Houses.	Huts.	Houses.
1914	Nil	Nil	Nil	Nil
1915	„	„	„	„
1916	„	„	10	„

6. MARKETS.

	Total number.	Number paved and drained.	Number unpaved.
1914	1	Nil	1
1915	1	„	1
1916	1	„	1

7. SLAUGHTER-HOUSES.

	Total number.	Number paved and drained.	Number unpaved.
1914	Nil	—	—
1915	„	—	—
1916	„	—	—

8. LATRINES.

	For Males.		For Females.	
	Number.	Number of seats.	Number.	Number of seats.
Number of Public Latrines :—				
1914	4	—	4	—
1915	4	—	2	—
1916	3	—	2	—
Number of new Public Latrines erected during the year :—				
1914	2	—	3	—
1915	Nil	—	Nil	—
1916	"	—	"	—
Number of Public Latrines repaired during the year :—				
1914	2	—	1	—
1915	4	—	2	—
1916	3	—	2	—
Number of Public Latrines demolished during the year :—				
1914	Nil	—	Nil	—
1915	1	—	"	—
1916	Nil	—	"	—

	1914	1915	1916
Number of Private Latrines	15	17	21
Average number of pails of nightsoil removed daily ..	15	17	25
Average number of soiled pails removed and clean pails substituted	15	17	25
Number of nightsoil men employed to clean latrines and remove excreta	15	17	22
Number of cesspools	Nil	Nil	Nil
Number of cesspools cleansed	"	"	—
Number of new cesspools constructed during the year ..	"	"	"
Number of old cesspools abolished	"	"	"
Number of cesspools oiled regularly by Department ..	"	"	"

9. REMOVAL OF REFUSE.

	1914	1915	1916
Number of dustbins	57	3	3
Number of carts at work daily to remove refuse from streets	Rubbish removed daily in boxes.		
Amount of refuse removed daily			
Number of carts at work daily to remove refuse from yards and premises... .. .			
Amount of refuse removed daily from yards and premises ..			
Number of men employed for moving refuse			

10. MODE OF DISPOSAL OF EXCRETA, REFUSE AND OFFAL.

	Daily average number of pails of excreta.			Daily average number of cartloads of refuse			Daily average number of cartloads of Slaughter House and Market Offal.		
	1914	1915	1916	1914	1915	1916	1914	1915	1916
Buried or trenched ...	15	19	25	—	—	—	—	—	—
Burnt ...	—	—	—	—	all	all	—	all	all
Thrown into sea ...	—	—	—	—	—	—	—	—	—
Otherwise dealt with ...	—	—	—	—	—	—	—	—	—

State mode of disposal.

11. AVERAGE DAILY NUMBER OF CARTLOADS OF TIN CANS, BOTTLES, BROKEN CROCKERY, AND OTHER INCOMBUSTIBLE MATERIAL REMOVED FROM HOUSES, HUTS AND COMPOUNDS.

1914	1915	1916
Nil	Nil	Nil

12. WATER SUPPLY.

Nature of Water Supply.	1914	1915	1916
Pipe-borne water :—			
Source (river, lake, or spring) :—			
Number of linear yards ...	—	—	—
Number of stand-pipes along roads ...	Nil	Nil	Nil
Number of stand-pipes in compounds and houses ...	—	—	—
Wells :—			
Public :—			
Number ...	Nil	Nil	Nil
Number with pumps protected against surface water and mosquito-protected ...	—	—	—
Private :—			
Number ...	4	4	4
Number protected against surface water and mosquito-protected ...	—	—	—
Tanks :—			
Public :—			
Number underground ...	Nil	Nil	Nil
Number mosquito-protected and served by pumps ...	"	"	"
Number above ground ...	"	"	"
Number mosquito-protected ...	"	"	"
Number of 400 gallons capacity or less ...	"	"	"
Number above 400 gallons ...	"	"	"
Private :—			
Number underground ...	Nil	Nil	Nil
Number mosquito-protected ...	"	"	"
Number above ground ...	—	2	2
Number mosquito-protected ...	—	Nil	Nil
Number of 400 gallons capacity or less ...	—	2	2
Number above 400 gallons ...	—	Nil	Nil

Nature of Water Supply.								1914	1915	1916
Nature of tanks :—										
Wood	—	Nil	Nil
Iron	—	2	2
Concrete	—	Nil	Nil
Barrels :—										
Number	—	”	”
Number mosquito-protected	—	”	”

13. DRAINAGE.

Nature of Drainage.								Public.	Private.
Masonry drains :—									
Lineal yards of masonry drains :—									
1914	...	...	...	...	...	...	...	Few and inefficient	
1915	...	...	...	...	...	...	...
1916	...	...	...	...	...	...	...
Lineal yards reconstructed during the year :—									
1914	...	...	...	...	...	...	...	Nil	
1915	...	...	...	...	...	...	...	3	
1916	...	...	...	...	...	...	...	Nil	
Lineal yards repaired during the year :—									
1914	...	...	...	...	...	...	...	Nil	
1915	...	...	...	...	...	...	...	4	
1916	...	...	...	...	...	...	...	Nil	
Lineal yards of new drains constructed during the year :—									
1914	...	...	...	...	...	...	...	Nil	
1915	...	...	...	...	...	...	...	”
1916	...	...	...	...	...	...	...	”
Earth drains or ditches :—									
Number of linear yards of ditches cleaned :—									
1914	...	...	...	...	...	...	...	Nil	
1915	...	...	...	...	...	...	...	”
1916	...	...	...	...	...	...	...	”
Number of linear yards of ditches dug and graded :—									
1914	...	...	...	...	...	...	...	Nil	
1915	...	...	...	...	...	...	...	”
1916	...	...	...	...	...	...	...	”
Average frequency of clearing ditches of grass :—									
1914	...	...	...	...	...	...	...	Nil	
1915	...	...	...	...	...	...	...	”
1916	...	...	...	...	...	...	...	”

14. CLEARANCE OF UNDERGROWTH, LONG GRASS AND JUNGLE.

								1914	1915	1916
Number of square yards of weeds, grass, and vegetation cut and removed										
Average frequency of clearance of rank vegetation on same area									40 acres (Twice.)	

15. EXCAVATIONS AND LOW-LYING LAND.

	1914	1915	1916
Number of pools and excavations	Nil	Nil	Nil
Number of excavations filled up	"	"	"
Amount of low-lying and marsh land raised and drained ...	"	"	"
Number of pools, marshes, streams, &c., fish-stocked ...	"	"	"
Number of cubic yards of material used for filling up pools and excavations	"	"	"
Number of persons fined for making new excavations ...	"	"	"
Average number of men daily employed in filling up pools &c.	"	"	"

16. OILING.

	1914	1915	1916
Number of drains oiled	Nil	Nil	Nil
Number of pools and excavations oiled	"	"	"
Number of tanks and barrels oiled	"	"	"
Average number of men daily employed for oiling drains, pools, and watertanks or barrels	"	"	"

17 INSPECTIONS AND PROSECUTIONS.

	1914	1915	1916
Number of inspectors employed	Nil	Nil	Nil
Number of houses inspected	All	All	All
Number of houses where larvæ were found	—	Nil	1
Number of notices served to remove conditions causing the breeding of larvæ	—	"	1
Number of persons fined for having mosquito larvæ on premises	—	"	Nil
Number of notices served to remove insanitary conditons on premises	3	—	5
Number of persons fined for not removing insanitary conditions after notice	Nil	Nil	Nil
Number of soda and aerated water factories inspected ...	"	"	"

SECTION V.

HOSPITALS AND DISPENSARIES.

There were no new buildings constructed, and no additions or alterations made to the existing ones.

DISEASES TREATED.

Table VI. gives the return of Diseases and Deaths of in-patients, and Table VII. of out-patients.

TABLE VI.

RETURN OF DISEASES (IN-PATIENTS) FOR THE YEAR 1916.

Diseases.	Admissions.	Deaths.
INFECTIVE DISEASES.		
Beri-Beri	4	1
Cerebro-Spinal Fever	1	1
Chicken-pox	10	—
Dysentery	48	2
Enteric	3	1
Gonorrhœa	10	—
Influenza	1	—
Malaria—Tertian	14	—
Aestivo-autumnal	31	—
Chronic Malaria	3	—
Black-water	2	1
Measles	5	—
Pneumonia	28	8
Relapsing Fever	1	1
Septicæmia	1	1
Trypanosomiasis (Sleeping Sickness)	31	28
Syphilis :—Primary	10	—
Secondary	9	—
Inherited	1	—
Tuberculosis	6	—
Whooping Cough	1	—
Yaws	3	—
Pyrexia	6	—
GENERAL DISEASES		
Anæmia—Pernicious	3	—
Lumbago	2	—
Debility	3	—
Rheumatism	8	—
Total	245	44

TABLE VI.—IN-PATIENTS—*Continued.*

RETURN OF DISEASES AND DEATHS (IN-PATIENTS) FOR THE YEAR 1916.

Diseases.	Admissions.	Deaths.
<i>Brought forward</i>	245	44
LOCAL DISEASES.		
Nervous System :—Epilepsy ...	1	—
Headache ...	4	—
Mania ...	2	—
Dementia ...	2	—
Delusional Insanity ...	2	—
Convulsions ...	1	—
Diseases of the Eye :—Conjunctivitis ...	8	—
Keratitis ...	1	—
Iritis ...	1	—
Cataract ...	1	—
Diseases of the Ear :—Inflammation ...	1	—
Diseases of the Nose :—Coryza ...	1	—
Circulatory System :—Cardiac dilatation ...	1	—
Oedema ...	4	—
Respiratory System :—Laryngitis ...	1	—
Bronchitis ...	32	—
Broncho-pneumonia ...	5	3
Pleurisy ...	6	—
Pleurodynia ...	1	—
Digestive System :—Stomatitis ...	1	—
Gastric ulcer ...	1	1
Hæmatemesis ...	1	—
Dyspepsia ...	1	—
Enteritis ...	3	—
Appendicitis ...	3	—
Ulceration of Intestines ...	1	1
Obstruction of bowel ...	1	—
Hernia ...	1	—
Diarrhœa ...	25	2
Constipation ...	14	—
Hæmorrhoids ...	2	—
Hepatitis—Acute ...	3	—
Cirrhosis ...	1	1
Jaundice ...	1	—
Lymphatic System :—Inflammation of Lymphatic Gland ...	2	1
Urinary System :—Acute Nephritis ...	1	—
Bright's Disease ...	1	—
Hæmaturia ...	6	—
Peri-nephritis ...	1	—
Generative System (Male Organs) :—Hydrocele ...	2	—
Phagedoena of penis ...	1	—
Generative System (Female Organs)—Normal labour ...	11	—
Abortion ...	1	—
Delayed Labour ...	4	1
Organs of Locomotion :—Osteitis ...	2	—
Arthritis ...	5	—
Hypertrophy of calf ...	1	—
Connective Tissue :—Cellulitis ...	4	—
Abscess ...	13	—
Diseases of the Skin—Eczema ...	3	—
Boil ...	8	—
Carbuncle ...	2	—
<i>Carried forward</i>	447	54

TABLE VI.—IN-PATIENTS.—*Continued.*

RETURN OF DISEASES AND DEATHS (IN-PATIENTS) FOR THE YEAR 1916.

Diseases.					Admissions.	Deaths.
<i>Brought forward</i>					447	54
LOCAL DISEASES.						
Diseases of the Skin :—Tinea					1	—
Scabies					10	—
Impetigo contagiosa					1	—
Ulcer					141	—
Burn					7	2
INJURIES.						
Local					231	4
SURGICAL OPERATIONS					18	1
Tumours					3	1
Carcinoma					1	—
Poisons					2	—
Snake bite					1	—
Parasites—Animal Bilharzia					2	—
Trematoda (Flukes)					2	—
Cestoda :—Tænia Solium					2	—
Nematoda :—Ascaris					1	—
Ankylostomiasis					2	—
Total.					872	62

TABLE VII

RETURN OF DISEASES (OUT-PATIENTS) FOR THE YEAR 1916.

Diseases.					Male.	Female.
INFECTIVE DISEASES.						
Beri-Beri					6	—
Cerebro-Spinal Fever					1	—
Chicken-pox					15	4
Dysentery					178	35
Erysipelas					1	—
Gonorrhœa					34	1
Influenza					2	—
Leprosy :—Nodular					1	—
Anæsthetic					1	—
Malaria :—Tertian					128	12
Aestivo-autumnal					142	46
Chronic Malaria					1	—
Black-water					1	—
Pneumonia					16	—
Paratyphoid					1	—
Rheumatism					101	7
Mumps					8	—
Septicæmia					—	1
Total					637	106

TABLE VII.—OUT-PATIENTS—*Continued.*

RETURN OF DISEASES (OUT-PATIENTS) FOR THE YEAR 1916.

Diseases.					Male.	Female.
<i>Brought forward</i>					637	106
INFECTIVE DISEASES.						
Syphilis :—Primary	...	...	...	...	49	3
Secondary	...	...	...	...	36	3
Inherited	...	...	...	...	4	—
Tuberculosis	...	...	...	...	6	1
Whooping Cough	...	...	...	...	3	—
Yaws	...	...	...	...	9	1
Pyrexia	...	...	...	...	29	5
INTOXICATIONS.						
Alcoholism	...	...	...	...	—	1
GENERAL DISEASES.						
Anæmia :—Pernicious	...	...	...	...	10	—
Scurvy	...	...	...	...	1	—
Debility	...	...	...	...	6	1
Lumbago	...	...	...	...	19	1
LOCAL DISEASES.						
Neuritis	...	...	...	...	12	—
Headache	...	...	...	...	103	4
Vertigo	...	...	...	...	1	—
Nervous System :—Paralysis Hypertrophic	...	...	...	...	1	—
Epilepsy	...	...	...	...	13	1
Neuralgia	...	...	...	...	59	11
Neurasthenia	...	...	...	...	3	—
Neurosis	...	...	...	...	1	—
Idiocy	...	...	...	...	1	—
Mania	...	...	...	...	1	1
Delusional Insanity	...	...	...	...	5	—
Diseases of the Eye :—Conjunctivitis	...	...	...	...	280	103
Ulceration of Cornea	...	...	...	...	3	—
Iritis	...	...	...	...	5	1
Cataract	...	...	...	...	4	—
Astigmatism	...	...	...	...	1	—
Diseases of the Ear :—Inflammation	...	...	...	...	190	61
Other Diseases	...	...	...	...	5	—
Cerumen	...	...	...	...	—	1
Diseases of the Nose :—	...	...	...	...	3	—
Coryza	...	...	...	...	102	17
Rhinitis	...	...	...	...	4	1
Circulatory System :—Valvular Mitral	...	...	...	...	3	—
Aortic	...	...	...	...	3	1
Tachycardia	...	...	...	...	1	—
Palpitation	...	...	...	...	1	—
Oedema	...	...	...	...	1	—
Cardiac dilatation	...	...	...	...	1	—
Heart block	...	...	...	...	1	—
Epistaxis	...	...	...	...	1	—
<i>Carried forward</i>					1,618	324

TABLE VII.—OUT-PATIENTS.—*Continued.*

RETURN OF DISEASES (OUT-PATIENTS) FOR THE YEAR 1916.

Diseases.			Male.	Female.
<i>Brought forward</i>			1,618	324
<i>LOCAL DISEASES—Continued.</i>				
Respiratory System:—Laryngitis			5	—
Bronchitis			513	115
Emphysema			1	1
Pleurisy			14	7
Empyema			2	1
Asthma			9	1
Phthisis			—	1
Pleurodynia			8	—
Digestive System:—Stomatitis			16	1
Caries of teeth			278	69
Sore Throat			23	5
Inflammation of Tonsils			6	—
Gastritis			12	2
Dyspepsia			42	3
Enteritis			3	1
Colitis			3	—
Ulceration of Intestines			1	—
Hernia			2	—
Diarrhœa			533	100
Constipation			529	55
Colic			9	1
Hæmorrhoids			3	—
Gastralgia			1	—
Hepatitis:—Acute			4	—
Abscess of liver			1	—
Cirrhosis			1	—
Lymphatic System:—Inflammation of Lymphatic Gland			8	2
Suppuration of Lymphatic Gland			5	—
Lymphangitis			1	—
Urinary System:—Acute Nephritis			2	—
Bright's Disease			2	—
Cystitis			—	1
Hæmaturia			12	—
Generative System (Male Organs):—Urethritis			4	—
Soft chancre			4	—
Hydrocele			5	—
Orchitis			7	—
Epididymitis			2	—
(Female Organs):—Ovaritis			—	1
Ovarian Cyst			—	2
Displacement of Uterus			—	1
Menorrhagia			—	2
Abortion			—	3
Mastitis			—	3
Organs of Locomotion:—Osteitis			33	4
Arthritis			38	13
Synovitis			16	—
Talipes varus			1	—
<i>Carried forward</i>			3,777	719

TABLE VII.—OUT-PATIENTS.—*Continued.*

RETURN OF DISEASES (OUT-PATIENTS) FOR THE YEAR 1916.

Diseases.					Male.	Female.
<i>Brought forward</i>					3,777	719
LOCAL DISEASES— <i>Continued.</i>						
Diseases of Connective Tissue :—Cellulitis					13	—
Abscess					54	5
Whitlow					8	—
Diseases of the Skin :—Urticaria					4	—
Eczema					47	16
Boil					135	18
Carbuncle					4	—
Herpes					4	—
Psoriasis					88	14
Tinea					89	6
Scabies					1,242	356
Impetigo contagiosa					3	—
Prickly Heat... ..					2	—
Erythema					1	—
Ulcer					1,297	313
INJURIES.						
Burns					31	9
Local					1,215	120
SURGICAL OPERATIONS					82	—
Tumours					1	1
Lipoma of scalp					1	—
Papillomata					2	—
Poisons					5	1
Parasites—Animal Bilharzia					2	—
Jigger					3	3
Trematoda (Flukes)					6	1
Cestoda :—Tænia Solium					6	—
Nematoda :—Ascaris					3	—
Trichocephalus Dispar.					1	—
Ankylostomiasis					2	—
Total					8,128	1,582

